

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A humanized immunoglobulin having binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M^{-1} , and wherein said immunoglobulin comprises an antigen binding region of non-human origin and at least a portion of an immunoglobulin of human origin, further wherein the antigen binding region of non-human origin comprises at least one framework region containing a substitution of at least one amino acid to a corresponding amino acid in the III2R heavy chain framework region or the H2F light chain framework region.
2. (Previously Presented) The humanized immunoglobulin of Claim 1, wherein the portion of immunoglobulin of human origin is a human constant region.
3. (Original) The humanized immunoglobulin of Claim 2, wherein the human constant region comprises an IgG constant region.
4. (Original) The humanized immunoglobulin of Claim 3, wherein the human constant region contains a mutation capable of reducing the effector function of the immunoglobulin.
5. (Previously Presented) The humanized immunoglobulin of Claim 4, wherein the human constant region comprises an IgG2 constant region and a Valine amino acid at position 234 of the IgG2 constant region is substituted with Alanine and/or a Glycine amino acid at position 237 of the IgG2 constant region is substituted with Alanine.

6. (Original) The humanized immunoglobulin of Claim 3, wherein the IgG constant region is selected from the group consisting of an IgG4 constant region and an IgG2 constant region.

7. (Original) The humanized immunoglobulin of Claim 1, wherein the antigen binding region is of rodent origin.

8. (Previously Presented) The humanized immunoglobulin of Claim 1, wherein the antigen binding region comprises a complementarity determining region of rodent origin, and the portion of an immunoglobulin of human origin is at least a portion of a human framework region.

9. (Previously Presented) The humanized immunoglobulin of Claim 8, wherein the complementarity determining region is derived from the 3D1 monoclonal antibody.

10. (Previously Presented) The humanized immunoglobulin of Claim 1, further comprising a constant region of human origin, wherein the heavy chain comprises a variable region of SEQ ID NO:6 and the light chain comprises a variable region of SEQ ID NO:8.

11. (Previously Presented) The humanized immunoglobulin of Claim 1, wherein said immunoglobulin can compete with the murine 3D1 antibody for binding to B7-2.

12. (Previously Presented) The humanized immunoglobulin of Claim 11, wherein the light and heavy chains each have three complementarity determining regions derived from the 3D1 antibody.

13. (Cancelled)

14. (Cancelled)

15. (Previously Presented) A humanized immunoglobulin having a binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M^{-1} , and wherein said humanized immunoglobulin is derived from the cell line deposited with the ATCC®, Accession No. CRL-12524.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Previously Presented) A humanized immunoglobulin light chain having binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M^{-1} , and wherein said immunoglobulin comprises CDR1, CDR2 and CDR3 of the light chain of the murine 3D1 antibody, and further wherein the immunoglobulin comprises at least one framework region containing a substitution of at least one amino acid to a corresponding amino acid in the framework region of the light chain of the human H2F antibody.

22. (Cancelled)

23. (Previously Presented) The humanized immunoglobulin light chain of Claim 21, wherein the light chain comprises a variable region of SEQ ID NO: 8.

24. (Previously Presented) An isolated nucleic acid molecule encoding an immunoglobulin light chain having a binding specificity for B7-2 comprising a nucleotide sequence selected from the group consisting of:

a) SEQ ID NO:7;

b) a nucleotide sequence encoding the amino acid sequence of
SEQ ID NO:8,

c) the nucleic acid sequence of a nucleic acid molecule which
hybridizes to the complement of the nucleic acid molecule comprising a nucleotide
sequence according to a) or b) under stringent hybridization conditions.

25. (Currently Amended) A humanized immunoglobulin ~~light~~heavy chain having
binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at
least about 10^7 M^{-1} , and wherein said immunoglobulin comprises CDR1, CDR2 and
CDR3 of the heavy chain of the murine 3D1 antibody, and further wherein the
immunoglobulin comprises at least one framework region containing a substitution of at
least one amino acid to a corresponding amino acid in the framework region of the
heavy chain of the human H2FIII2R antibody.

26. (Cancelled)

27. (Currently Amended) The humanized immunoglobulin heavy chain of Claim
21~~25~~, wherein the heavy chain comprises a variable region of SEQ ID NO:6.

28. (Previously Presented) An isolated nucleic acid molecule encoding an
immunoglobulin heavy chain having binding specificity of B7-2 comprising a nucleotide
sequence selected from the group consisting of:

a) SEQ ID NO: 5,
b) a nucleotide sequence encoding the amino acid sequence of
SEQ ID NO: 6,

c) the nucleotide sequence of a nucleic acid molecule which hybridizes to the complement of the nucleic acid molecule comprising a nucleotide sequence according to a) or b) under stringent hybridization conditions.

29. (Cancelled)

30. (Previously Presented) An expression vector comprising a nucleic acid encoding a humanized immunoglobulin light chain, said nucleic acid comprising a nucleotide sequence encoding a CDR derived from a nonhuman antibody having binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M⁻¹, further wherein the immunoglobulin comprises at least one framework region containing a substitution of at least one amino acid to a corresponding amino acid in the framework region of the light chain of the human H2F antibody.

31. (Previously Presented) The expression vector of Claim 30, wherein the nonhuman antibody is the murine 3D1 antibody and a substitution of at least one amino acid to a corresponding amino acid in the framework region of the heavy chain of the human III2R antibody.

32. (Original) A host cell comprising the expression vector of Claim 30.

33. (Previously Presented) An expression vector comprising a nucleic acid encoding a humanized immunoglobulin heavy chain, said nucleic acid comprising a nucleotide sequence encoding a CDR derived from a nonhuman antibody having binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M⁻¹, further wherein the immunoglobulin comprises at least one framework region containing a substitution of at least one amino acid to a corresponding amino acid in the framework region of the heavy chain of the human III2R antibody.

34. (Previously Presented) The expression vector of Claim 33, wherein the nonhuman antibody is the murine 3D1 antibody.

35. (Original) A host cell comprising the expression vector of Claim 33.

36. (Previously Presented) A host cell comprising at least one nucleic acid molecule encoding the humanized immunoglobulin of Claim 1.

37. (Cancelled)

38. (Previously Presented) A method of preparing a humanized immunoglobulin comprising maintaining a host cell of Claim 36 under conditions appropriate for expression of a humanized immunoglobulin, wherein humanized immunoglobulin chains are expressed and a humanized immunoglobulin is produced.

39. (Original) The method of Claim 38, further comprising the steps of isolating the humanized immunoglobulin.

40. (Previously Presented) A nucleic acid encoding a humanized immunoglobulin light chain having a binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M^{-1} , comprising:

a) a first nucleic acid molecule encoding an antigen binding region derived from the murine 3D1 monoclonal antibody, further wherein the immunoglobulin comprises at least one framework region containing a substitution of at least one amino acid to a corresponding amino acid in the framework region of the light chain of the human H2F antibody; and

b) a second nucleic acid sequence encoding at least a portion of a constant region of an immunoglobulin of human origin.

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Cancelled)

46. (Previously Presented) A pharmaceutical composition comprising the immunoglobulin of Claim 1 and a pharmaceutically acceptable carrier.

47.-63. (Cancelled)

64. (Previously Presented) An expression vector comprising a nucleic acid encoding a humanized immunoglobulin light chain, said gene comprising the nucleotide sequence of Claim 24.

65. (Previously Presented) A host cell comprising the expression vector of claim 64.

66. (Previously Presented) An expression vector comprising a nucleic acid encoding a humanized immunoglobulin heavy chain, said gene comprising the nucleotide sequence of Claim 28.

67. (Previously Presented) A host cell comprising the expression vector of claim 66.

68. (Previously Presented) The humanized immunoglobulin of Claim 10, wherein the human constant region comprises an IgG constant region.

69. (Previously Presented) The humanized immunoglobulin of Claim 68, wherein the human constant region contains a mutation capable of reducing the effector function of the immunoglobulin.

70. (Previously Presented) A humanized immunoglobulin of Claim 69, wherein the human constant region comprises an IgG2 constant region and a Valine amino acid at position 234 of the IgG2 constant regions is substituted with Alanine and/or a Glycine amino acid at position 237 of the IgG constant region is substituted with Alanine.

71. (Previously Presented) The humanized immunoglobulin of Claim 68, wherein the IgG constant region is selected from the group consisting of an IgG4 constant region and an IgG2 constant region.

72. (Previously Presented) A host cell comprising at least one nucleic acid molecule encoding the humanized immunoglobulin of Claim 10.

73. (Previously Presented) A method of preparing a humanized immunoglobulin comprising maintaining a host cell of Claim 72 under conditions appropriate for expression of a humanized immunoglobulin, wherein said humanized immunoglobulin chains are expressed and a humanized immunoglobulin is produced.

74. (Previously Presented) The method of Claim 73, further comprising the steps of isolating the humanized immunoglobulin.

75. (Previously Presented) A nucleic acid encoding a humanized immunoglobulin heavy chain having a binding specificity for B7-2, wherein said immunoglobulin has a binding affinity of at least about 10^7 M^{-1} , comprising:

a) a first nucleic acid molecule encoding an antigen binding region derived from the murine 3D1 monoclonal antibody, further wherein the immunoglobulin comprises at least one framework region containing a substitution of at least one amino acid to a corresponding amino acid in the framework region of the heavy chain of the human III2R antibody; and

b) a second nucleic acid sequence encoding at least a portion of a constant region of an immunoglobulin of human origin.

76. (Previously Presented) The humanized immunoglobulin of either of claims 1 or 10 which binds to human B7-2 with an affinity of about $1 \times 10^9 \text{ M}^{-1}$.

77. (Previously Presented) An isolated nucleic acid molecule encoding the full length complement of either: (a) SEQ ID NO: 7 or (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 8.

78. (Previously Presented) An isolated nucleic acid molecule encoding the full length complement of either: (a) SEQ ID NO: 5 or (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 6.

79. (Previously Presented) A method of treating an individual having an inflammatory disorder comprising administering a therapeutically effective amount of the humanized immunoglobulin of claim 1.